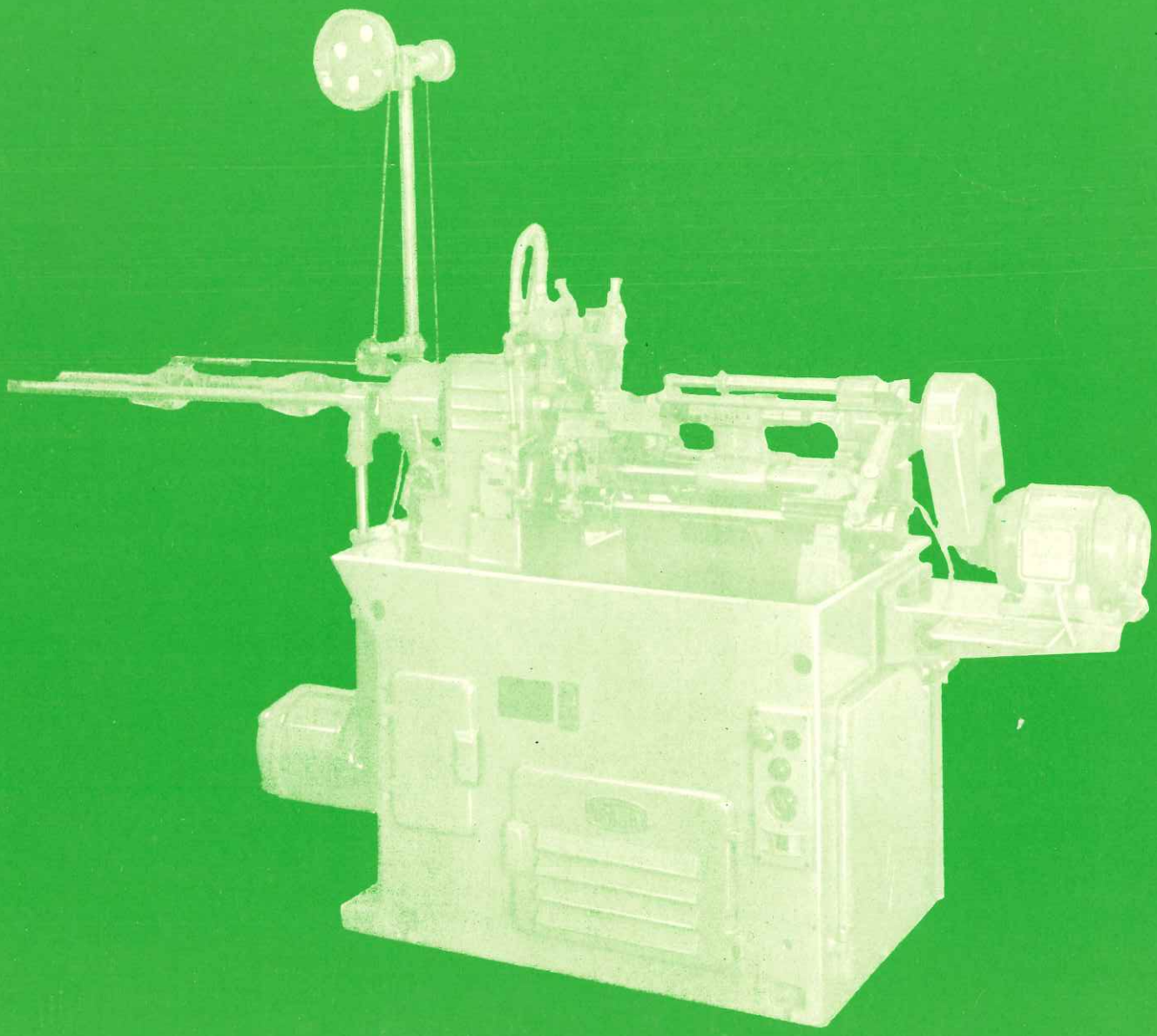
82-117

TRAUB



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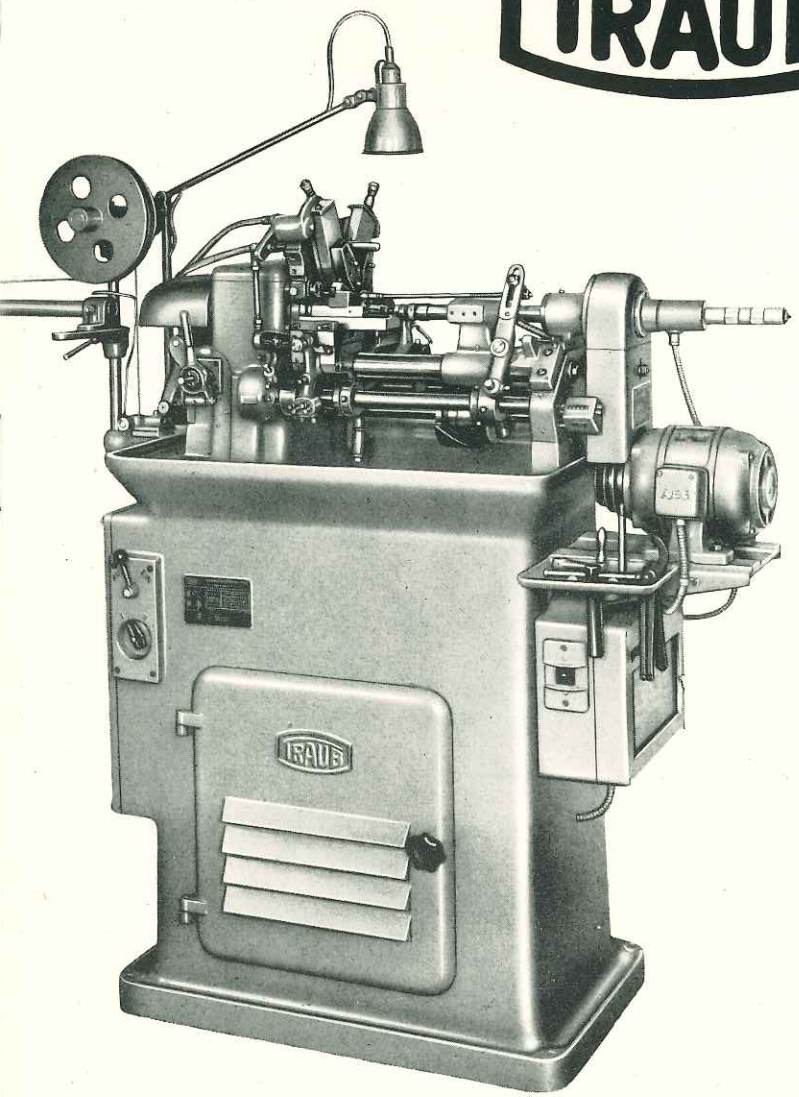
GUTHERY MACHINE TOOL CORPORATION

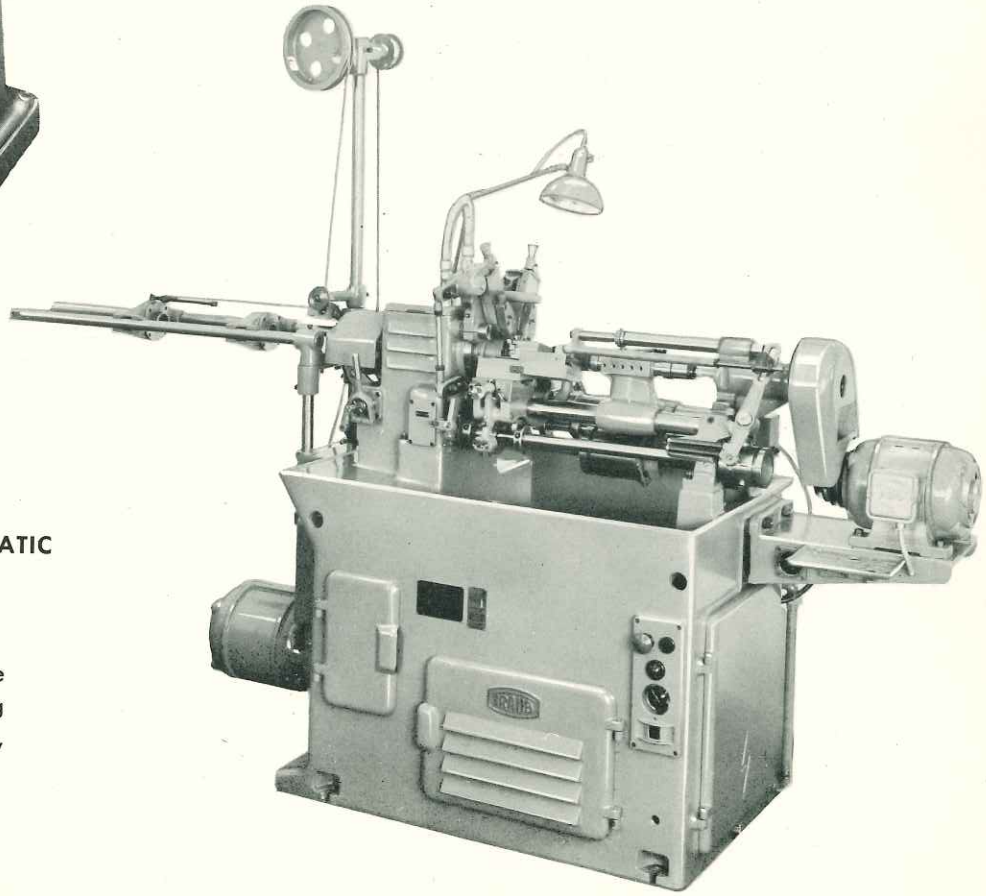
TRAUB ...First IN SIMPLICITY



"TRAUB" SINGLE SPINDLE AUTOMATIC SCREW MACHINES

MODELS: A-15 (19/32"), A-20 (13/16"), A-25 (1")

with: Standard Equipment and Double Vertical Slide, Longitudinal Turning Attachment, Threading Attachment, Machine Light, Workpiece Counter.



"TRAUB" SINGLE SPINDLE AUTOMATIC

MODEL A-42 (1 5/8")
and
MODEL A-56 (2-3/16")

with: Standard Equipment and Double Vertical Slide, Longitudinal Turning Attachment, Threading Attachment, Machine Light.

TRAUB

GENERAL DATA:

With the exception of a few components, primarily in the Spindle Assembly, parts are freely interchangeable between Models A15, A20, A25, and to a lesser degree, Model A15L. The same relationship exists between Models A42 and A56.

Attachments, accessories and tooling as described in other sections of this catalog are interchangeable on Models A-15, A-20, A-25, A-15-L and on Models A-42 and A-56.

The same cams can be used for Models A15, A20 and A25.

Spindles on all models run counter-clockwise so that Standard Righthand-Twist Drills can be used.

MODEL NO. .
Maximum Collet Capacity
Brown & Sharpe or Hardinge (Stationary Push Type) Collet No.
Spindle Speed Range (12 steps)
Production (44 steps)
Maximum Longitudinal Turning Length
Spindle Drive Motor (220/60/3/A.C.)
Camshaft Drive Motor (220/60/3/A.C.)
Floor Space required (without Feed Tube)
Approximate Net Weight
Approximate Shipping Weight
Approximate Dimensions of Case
Approximate Cubic Measurements
Packing Case for Feed Tube

	A-15	A-20	A-25	A-42	(for light) work only) A-56	SWISS-TYPE TRAUB A-15-L
	19/32"	13/16"	1"	1 5/8"	2 3/16"	19/32"
	#10	#11	#21	#22 & #22-C #22-CT	SPECIAL (INDEX)	#10
	900/6500	550/4000	550/4000	240/2920	240/2920	900/6500
	28/3000 pcs. per hr.	28/3000 pcs. per hr.	28/3000 pcs. per hr.	12/1245 pcs. per hr.	12/1245 pcs. per hr.	28/3000 pcs. per hr.
	3 3/4"	3 3/4"	3 3/4"	4 1/2"	4 1/2"	4"
	2 H.P.	2 H.P.	2 H.P.	3 H.P.	3 H.P.	2 H.P.
	1/2 H.P.	1/2 H.P.	1/2 H.P.	3/4 H.P.	3/4 H.P.	1/2 H.P.
	22"x43"	22"x43"	22"x43"	28"x63"	28"x63"	22"x43"
	1280 lbs.	1280 lbs.	1280 lbs.	2700 lbs.	2700 lbs.	1280 lbs.
	1580 lbs.	1580 lbs.	1580 lbs.	3200 lbs.	3200 lbs.	1580 lbs.
	28"x59"x63"	28"x59x63"	28"x59"x63"	40"x78"x70"	40"x78"x70"	28"x59"x63"
	60 cu. ft.	60 cu. ft.	60 cu. ft.	127 cu. ft.	127 cu. ft.	60 cu. ft.
	2 1/2"x2 1/2"x13 ft.	2 1/2"x2 1/2"x13 ft.	2 1/2"x2 1/2"x13 ft.	4 1/2"x3 1/2"x14 ft.	4 1/2"x3 1/2"x14 ft.	2 1/2"x2 1/2"x13 ft.

GENERAL INFORMATION

MACHINE BASE:

All Models are built on box-type cast-iron bases of extreme rigidity.

SPINDLE:

Spindles are hardened and ground. They are supported in standard, pre-loaded, angular-contact ball bearings — double row in front and single row in rear. Adjustment for radial as well as end thrust is provided.

TOOL SLIDES:

All Slides move on dovetail ways with gib adjustment. The standard tool holders are equipped with rockers as well as with a fine longitudinal adjustment. Fulcrum arms have micrometers for accurate depth setting.

Open, Double and Triple Tool Holders or Circular Form Tool and Thread Roll Holders can be used on the cross slides in place of the standard rocker-type tool holders.

Many of the cam levers have adjustable transmission ratios making it possible to utilize cams for a variety of applications.

TAILSTOCK:

The Tailstock moves on hardened and lapped guide bars. It is equipped with quill and collet drawbar.

	A 15, 20 and 25	A 42, 56
Max. Capacity of Tailstock Collets	½″	⅞″
Max. Travel of Tailstock	4″	6″
Special Quills (to order)	⅝″	3 M.T.

CAM LEVER TRANSMISSION RATIOS: (All Models)

For the Front and Rear Slides:	2:1 or 1:1 (fixed) adjustable for either ratio
For the Single Vertical or the Double Vertical Slides	1:1 to 2:1 (variable) adjustable for any ratio within this range
For the Tailstock and the Tailstock-mounted attachments	1:1 (fixed)
For the Longitudinal Turning Attachment (A-15, A-20, A-25 and A42 only)	1:1.1 to 1:2 (variable) adjustable for any ratio within this range
For the Double-Drilling Attachment	1.3:1 (fixed)
For the axial (longitudinal) movement of the Cross and Vertical Slides. (A-15-L only)	1:1 (fixed)
Centering Attachment and Centering Attachment -and-Swing Stop	Standard Cams for both Attachments. Swing-Stop is Standard Equipment on Models A-15, A-20, A-25, and A-42. Swing-Stop not used on A-15-L
Threading Attachment (A-15, A-20, A-25, A-15-L)	1:1 (fixed)

SPINDLE DRIVE:

The Spindle is driven by a two-speed motor with endless V-Belts. A counter-shaft is located between the drive motor and the spindle. The 12 different spindle speeds, which are available on all models, are obtained by shifting the belts on the pulleys and by switching the two-speed motor.

CAMSHAFT DRIVE:

All Models have three camshafts which are driven independently of the spindle drive, by a separate motor through a chain drive and change-gear transmission. The 44 different rates of production, which are available on all models, are governed by the change-gear transmission. These gears are readily accessible for fast change-over from one hourly production rate to another.

A Single Speed Feed Motor is supplied with Models A15, A20 and A25.

Models A15-L, A42 and A56 are supplied with two-speed motors as part of the feed accelerator which is standard on these models. With this equipment the time required for feedout and chucking is cut in half as the speed of the feed motor is doubled during that part of each cycle.

The Feed accelerator is available as optional equipment for Models A15, A20 and A25. It is, however, not recommended wherever the time cycle is less than 7 seconds.

CLUTCH:

A friction clutch in the camshaft-drive mechanism permits the camshafts to be stopped in any position. During set-up the camshafts can also be turned manually by means of a detachable hand crank.

STOCK STOP:

On all Models except Model A15-L the bar-stock stops to length against a Swing Stop, consisting of an adjustable swing arm which has its fulcrum on the rear guide-bar, and which is actuated by a standard cam. This cam need never be changed, and is used for all jobs.

BAR STOCK FEED:

A gravity (weight) feed, for 12 foot bars, is supplied as standard equipment with all models.

Air Feeds or Automatic Magazine Loading Bar Feeds can be supplied as optional equipment at extra cost.

FEED-FINGER MECHANISM:

When working with stock of extremely small diameters, it may be preferable to replace the standard weight feed with a Feed Finger Attachment which is available as optional equipment, at extra cost, for Models A15, A20 and A25.

COOLANT SYSTEM:

Coolant reservoir and coolant pump are built into the machine base and are easily accessible.

ELECTRICAL EQUIPMENT:

All motors and controls are readily accessible. Standard electricals are 220 volt, 60 cycle, 3 phase, alternating current. Special electricals can be supplied if desired.

Model A-15-L

Turning-and-Copying-Automatic

WITH SWISS-TYPE GUIDE BUSHING SUPPORT

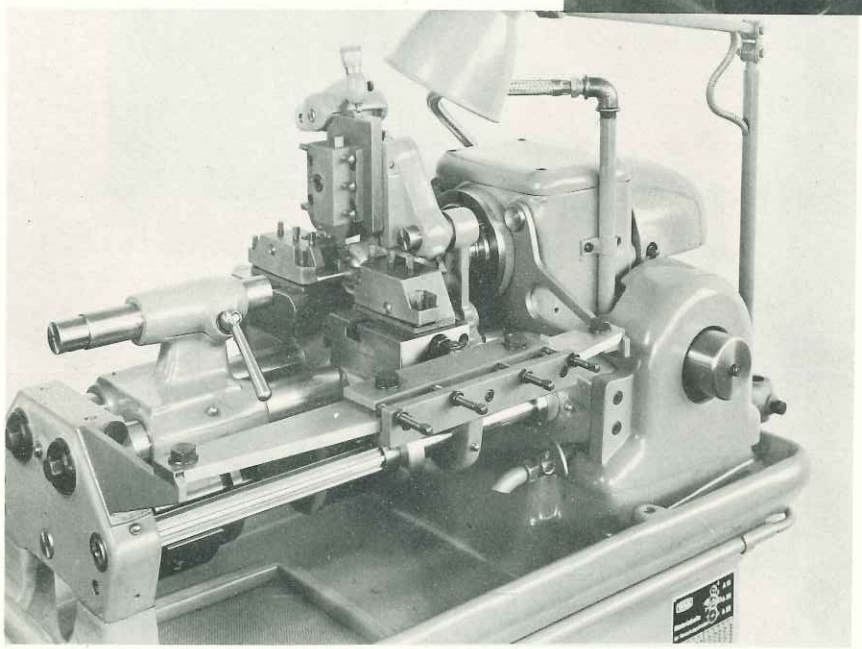
The "TRAUB" Turning-&-Copying Automatics differ from the generally known Swiss-Type Automatics in a number of ways:

The generally known Swiss-Type Automatics (but NOT the TRAUB) employ:	"TRAUB" Turning & Copying Automatic Model A-15-L employs:
1. A Headstock which is not stationary, but can slide axially.	1. A Headstock which is stationary, and can not slide axially.
2. A Guide Bushing which is stationary, and can not slide axially.	2. A Guide Bushing which is not stationary, but can move axially.
3. Front & Rear Rockers, controlled from a single plate cam, which can move radially, but not axially, during the operating cycle.	3. Front and Rear Slides, controlled from independent flat cams, which can move both radially and axially during the operating cycle.
4. Vertical Slides, controlled from plate cams, which can move radially, but not axially, during the operating cycle.	4. Vertical Slides, controlled from independent flat cams, which can move both radially and axially during the operating cycle.

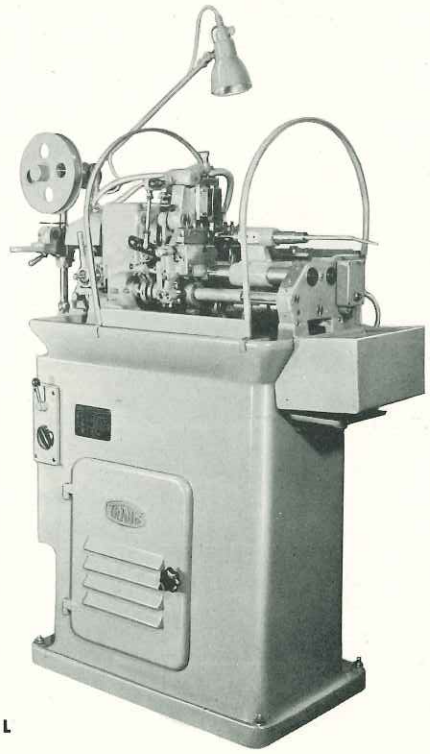
"TRAUB" Turning-&-Copying Automatics are provided with a Copying-Templet by means of which the Rear Slide may be controlled.

The extremely close tolerances and high finish obtained on all diameters, and the near-perfect concentricities of all parts, are obtained by means of the removable Guide Bushing which supports the bar stock. The cutting tools can operate very close to the

Detail of Guide Bushing and of Radially and Axially Sliding Toolholders. Model A-15-L.



Detail of Standard Equipment Copying-Templet Holder. Model A-15-L.



"TRAUB" Turning-and-Copying Automatic. Model A-15-L

point of support, within $\frac{1}{32}$" of the Guide Bushing Face. The Guide Bushing is mounted on the axially sliding carriage which carries the Cross and Vertical Slides.

Model A-15-L has a maximum collet capacity of $\frac{19}{32}$" and a maximum turning length of 4".

The Rapid Feeding Cycle Equipment (Accelerator) is standard equipment on Model A-15-L. It accelerates the return motion of the slides, the tailstock, and the tailstock-mounted endworking attachments.

ATTACHMENTS

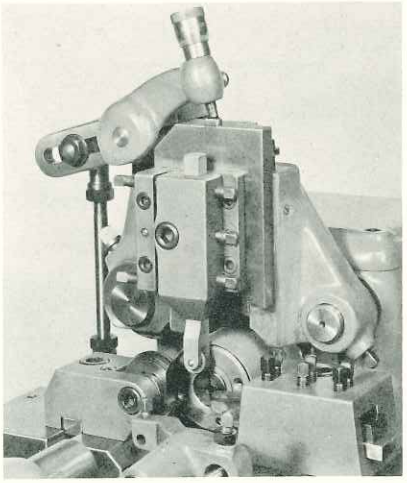
LONGITUDINAL TURNING ATTACHMENT:

This very versatile attachment can be supplied for all models, with the exception of Model A15-L. The Longitudinal Turning Attachment serves for single point turning of cylindrical, tapered, generated and step-turned parts. A drill holder assembly is available to permit simultaneous drilling and turning with this attachment. It is also possible to use the Longitudinal Turning Attachment for internal and external recessing operations. The Longitudinal Turning Attachment is fed radially by a flat cam and longitudinally by a drum cam, both mounted on the same camshaft. Available for front and rear slides.

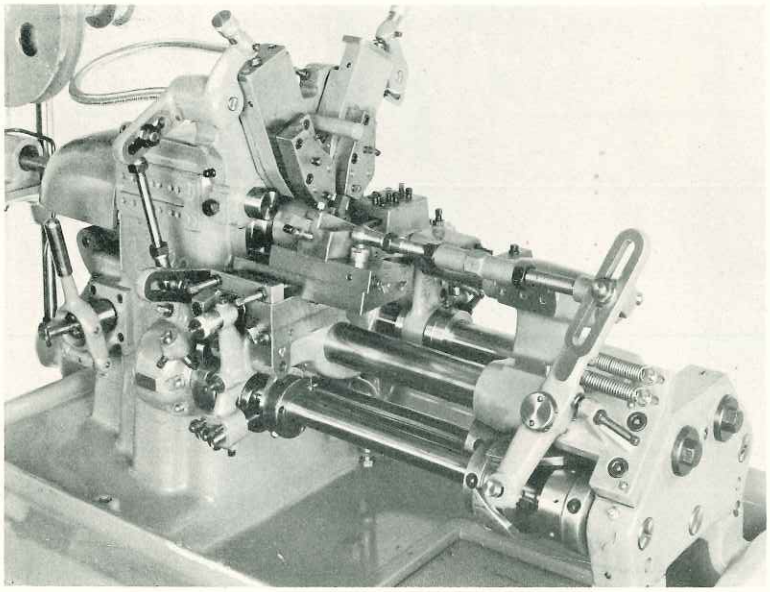
Maximum Turning Length with this attachment is 3¾″ for Models A15, A20 and A25, 4½″ for Models A42 and A56.

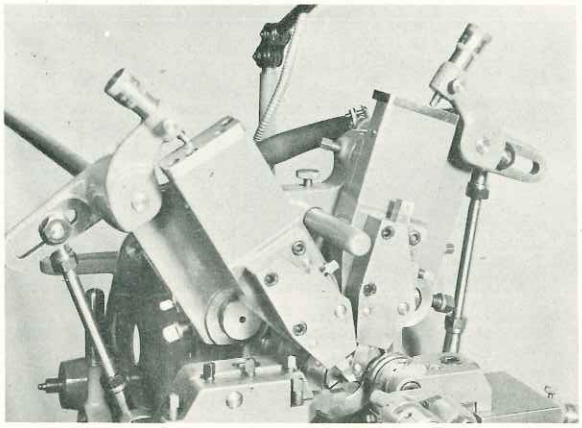
VERTICAL SLIDES:

Single Vertical Slides and Double Vertical Slides are available for all models. Both types are of very rigid construction. The slides move on dovetail ways which are equipped with adjustable gibs. Micrometer adjustment.



SINGLE VERTICAL SLIDE





DOUBLE VERTICAL SLIDE

THREADING ATTACHMENT:

On Models A15, A20, A25 and A15-L this attachment consists of a Spindle which is supported by the Tailstock and driven by a separate 2-speed motor with endless V-belts. The Threading Spindle revolves in the same direction as the Main Spindle but at a lower speed so as to obtain the proper feed-in ratio. Upon completion of the thread the Threading Motor is automatically thrown into high speed. The die now revolves faster than the Main Spindle and is, in this manner, removed from the finished thread. Inasmuch as the Main Spindle revolves at a constant speed it is possible to form and/or turn, during the threading operation. Standard solid dies can be used in this attachment.

Capacity	In Steel	In Brass, Aluminum, etc.	Max. Length of Thread
Thread	1/8" – 5/16"	1/8" – 3/8"	1.9/16"
Tap	1/8" – 5/16"	1/8" – 3/8"	Depends on Thread Dia.

Two methods of threading are available for Models A42 and A56. One consists of a motor-driven attachment with a rotating, self-opening die head while the other is the "Fette" Thread Rolling Head which is mounted in the regular tailstock and does not revolve.

The Threading Attachment has a capacity of 5/8" in steel (7/8" in brass and aluminum) and will thread up to 2 3/4" in length depending on material and type of thread.

The "Fette" Thread Rolling Head has a capacity of 5/8" and will thread up to 3 1/8" in length.

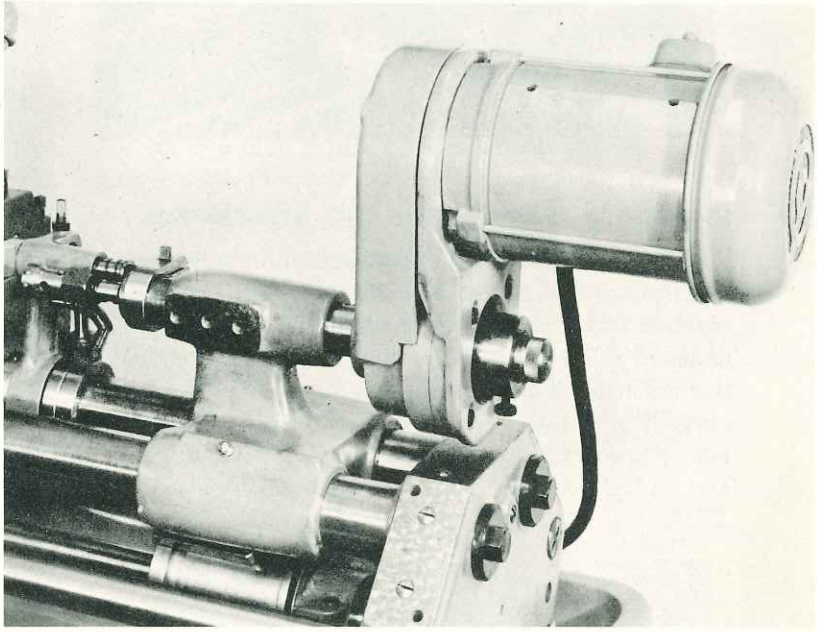
(Thread Roll Holders for the Cross Slides are available for all models)

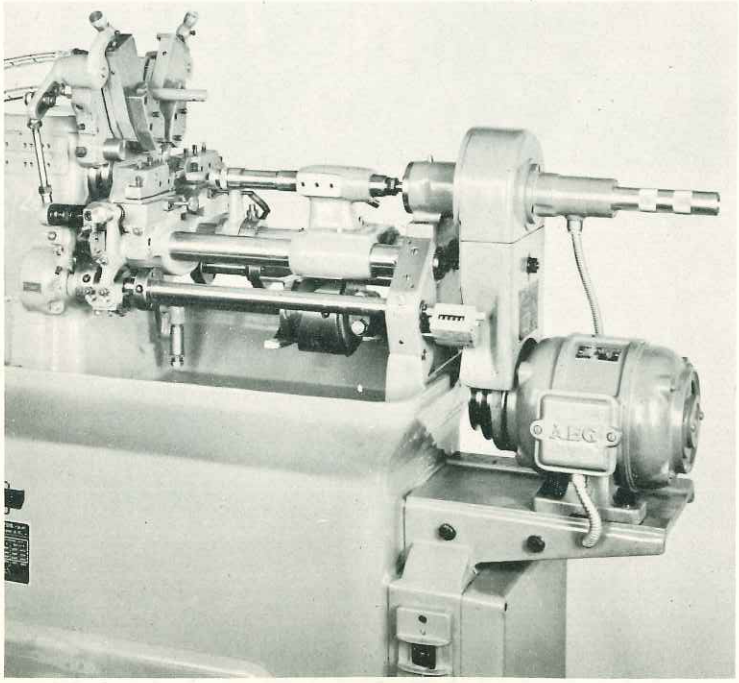
SMALL THREADING ATTACHMENT:

For threads up to 5/32" the use of this attachment is recommended. The unit is mounted in the tailstock and it is driven by a separate motor. For Models A15, A20, A25 and A15-L only.

Spindle speed: 6000/3750 r.p.m.

Capacity	5/32"
Maximum thread length (external)	13/32"
Maximum thread length (internal)	15/64"





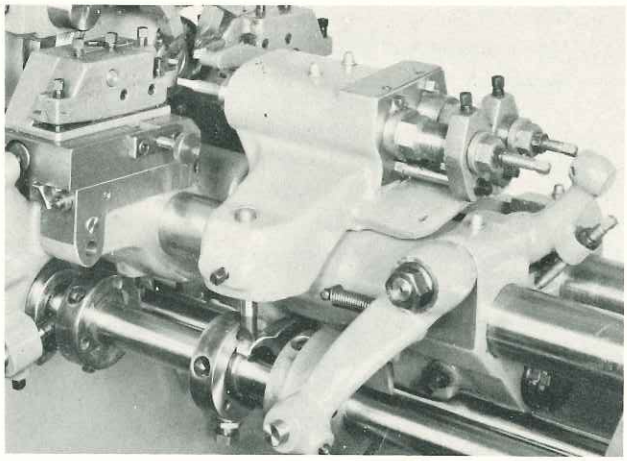
DOUBLE DRILLING ATTACHMENT:

The Double Drilling Attachment may be used where more than one drilling operation is required such as in stepped holes or where a hole requires reaming after the drilling operation.

The attachment consists of two quills with draw-in collets and draw bars, mounted in a sturdy cast iron housing. The attachment is indexed and the quills are brought on center by a flat cam while the

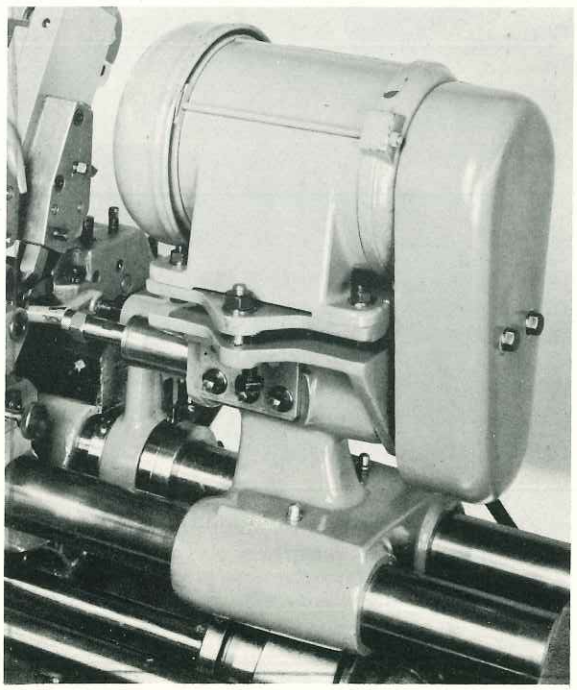
quills are fed longitudinally by a double-lobe drum cam. Both cams are mounted on the front camshaft.

	Max. Stroke	Collet Capacity
Models A15, A20, A25	1 3/16″	1/2″
Models A42, A56	2″	5/8″



HIGH-SPEED SENSITIVE DRILLING ATTACHMENT:

This attachment is recommended where deep holes of small diameter are to be machined. An individual motor drives the drilling spindle which is mounted in precision ball bearings and supported by the tailstock. The drilling spindle revolves in the opposite direction as the main spindle. The drill is held in a collet. Capacity for Models A15, A20, A25 and A15-L is 3/16″, for Models A42 and A56 .275″.



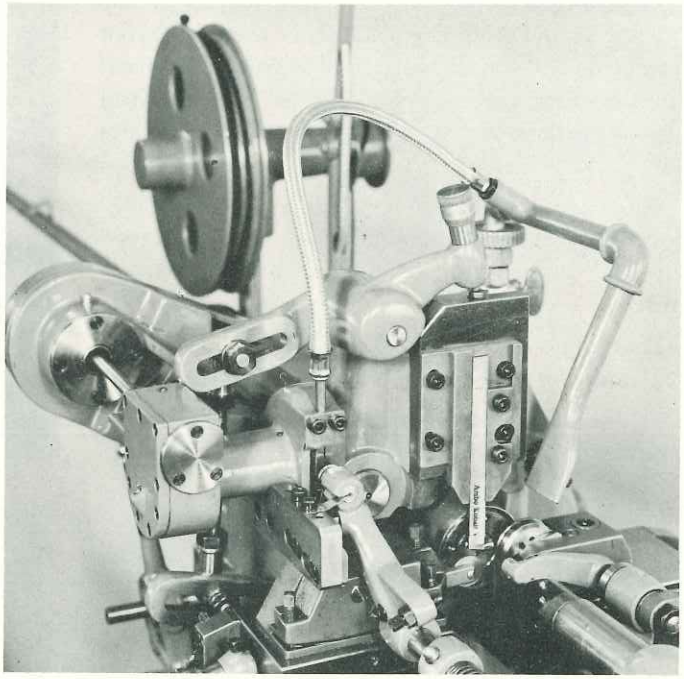
SLOTTING ATTACHMENT—PICK-UP ARM:

The Slotting Attachment consists of a rotating circular saw blade which is driven from the main spindle by a V-Belt.

The cam operated pick-up arm receives the part just before cut-off and conveys it to the blade for slotting. The completed piece is automatically ejected from the pick-up arm. As the slotting operation is performed while the next piece is being machined it does not in any way increase the cycle time.

The cam-operated pick-up arm or a permanent magnet pick-up arm can also be used to pick off parts as they are severed to keep them separated from the chips. The magnetic pick-up attachment is, of course, suitable for ferrous metals only.

The Slotting and Pick-Up Attachments are available for Models A15, A20 and A25.

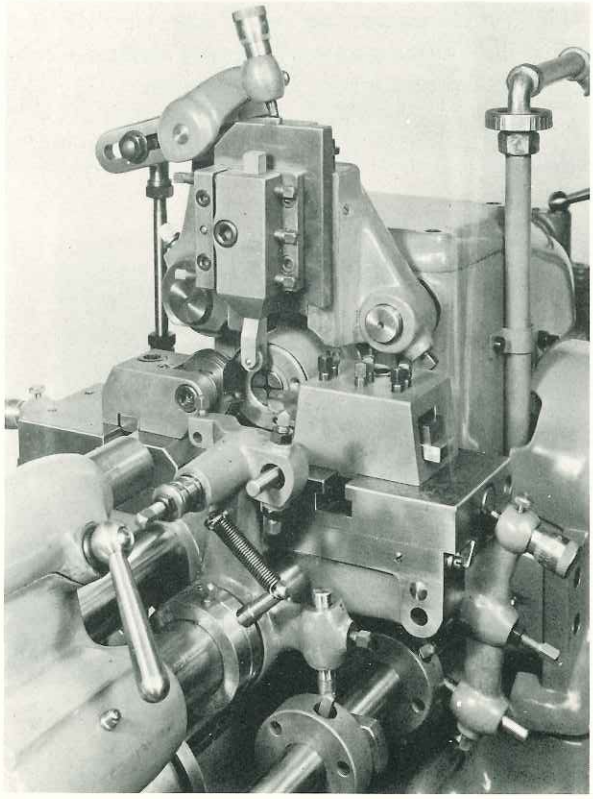


BACK DRILLING (BURRING) ATTACHMENT:

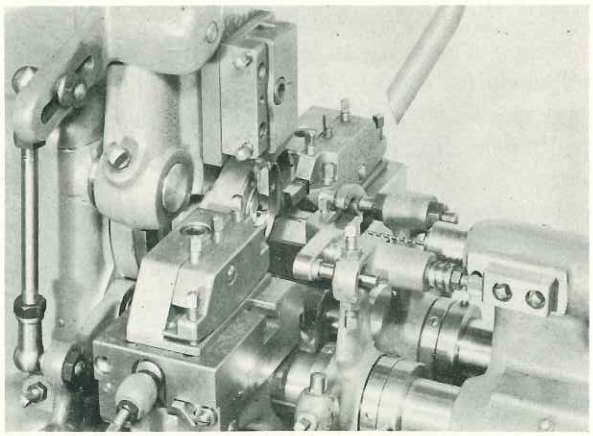
This attachment is similar in design to the Slotting Attachment and the same pick-up attachment is used in conjunction with it, however the pick-up arm itself must be replaced. Available for Models A15, A20 and A25.

CENTERING ATTACHMENT:
COMBINATION SWING-STOP AND CENTERING ATTACHMENT:

These attachments are available for all models with the exception of Model A15-L. The Centering Attachment is operated from the front camshaft while the Combination Swing-Stop and Centering Attachment is actuated by the rear camshaft. Both attachments are suitable for centering and light drilling.



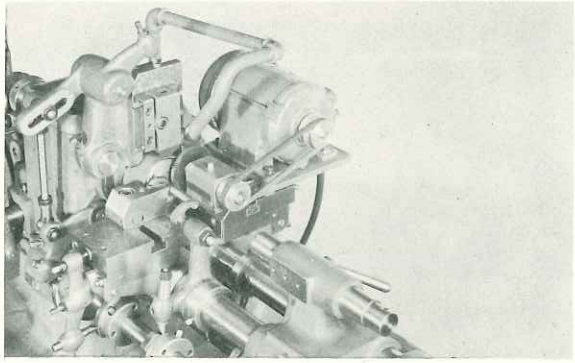
Combination Swing Stop-Stop and Centering Attachment.



Centering Attachment.

MILLING ATTACHMENT:

This attachment which is mounted on the rear slide, is driven by a separate motor with a V-belt. It is recommended for chatter-free grooving and parting of extruded, serrated, fluted or gear cross-section stock. Available for Models A15, A20 and A25.



OPPOSED SPINDLE ATTACHMENT:

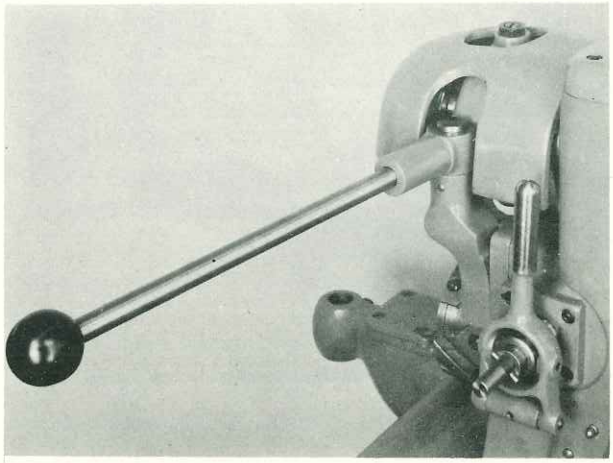
The Opposed Spindle Attachment is used for cutting-off without a burr.

The Spindle which is driven by an individual motor revolves, of course, in the same direction as the main spindle. An adjustable pulley makes it possible to regulate the speed of this attachment to synchronize it with the main spindle. The stock is held in a collet during cut-off and is automatically ejected when the piece has been severed. This attachment is available for Models A15, A20 and A25.

HAND CHUCKING ATTACHMENT:

This Attachment is used for secondary operations whenever the part is of such shape that it is not practical to feed it through a magazine. In using this unit the machine is automatically shut-off at the end of each cycle by means of a shut-off switch.

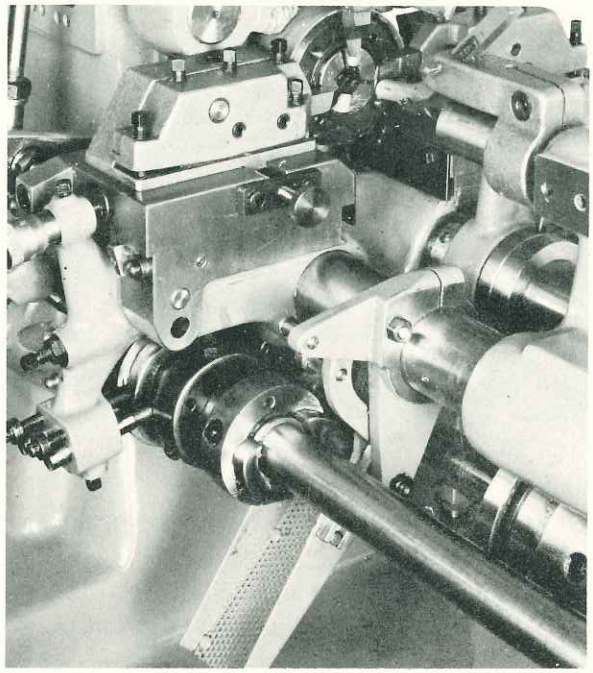
Available for all models, except Model A15-L.



PARTS DEFLECTOR:

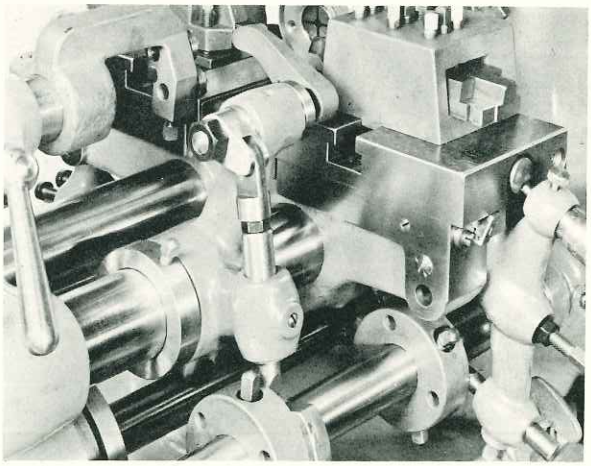
The cam-controlled chute is swung into position just before completion of cut-off to deflect parts into a receptacle, away from chips.

For Models A15, A20 and A25 only.



OVERHEAD SWING STOP:

Under certain conditions, which may arise, e.g. in the machining of very short parts, the use of this swing-stop becomes necessary.



WORKPIECE COUNTER:

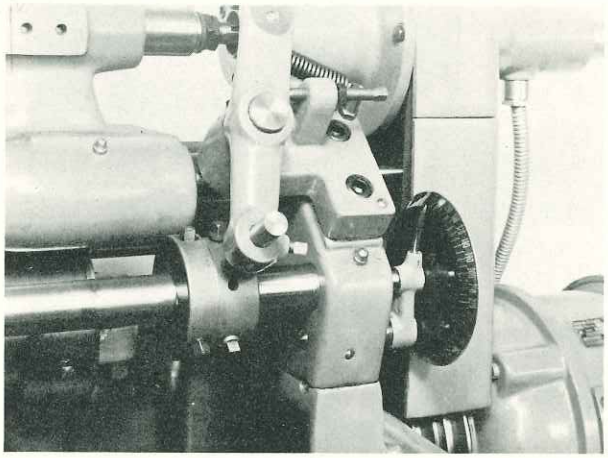
A 5-digit counter is available for all models. The counter can be re-set to zero by means of a small key.

AUTOMATIC ELECTRIC SHUT-OFF:

This device automatically stops the machine, when a bar is used up. It consists of a micro-switch actuated by an adjustable trip lever. Available for all Models.

CAM SETTING DEVICE:

This simple aid for the set-up man consists of a dividing disc with a pointer. It greatly facilitates conforming to the cam layout during set-up.



MACHINE LIGHT:

A machine light with concealed wiring is available for all Models.

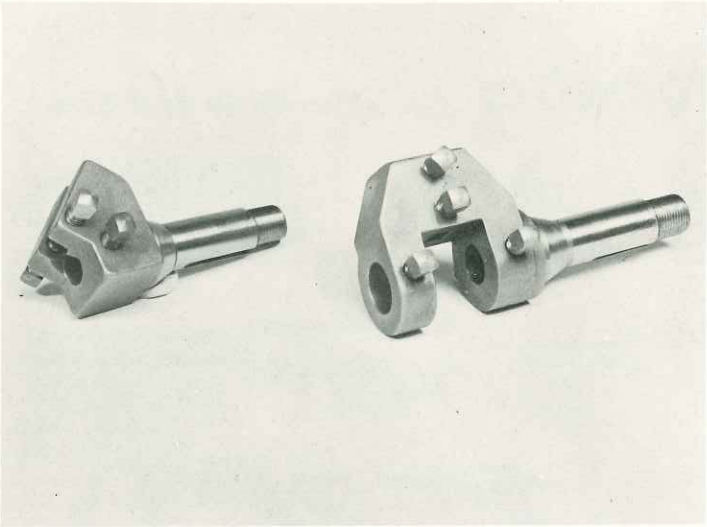
SPLASH GUARDS:

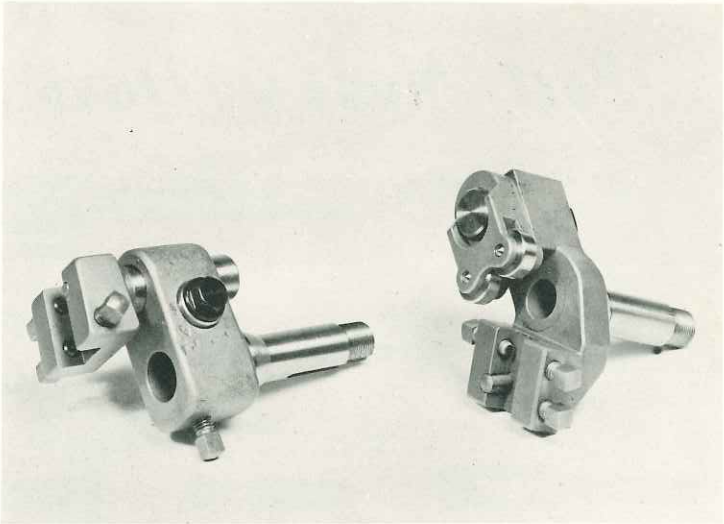
Simple Sheet Metal Splash Guards are standard equipment on Models A15, A20 and A25. On all other models transparent plastic splash guards in sturdy metal frames are supplied as standard equipment.

Transparent Splash Guards are also available for Models A15, A20 and A25 as optional equipment, at extra cost.

MAGAZINE FEEDS AND HOPPER FEEDS:

Magazines and Hoppers for secondary operations can be supplied. We shall be glad to submit quotations on the basis of prints of the parts to be machined.

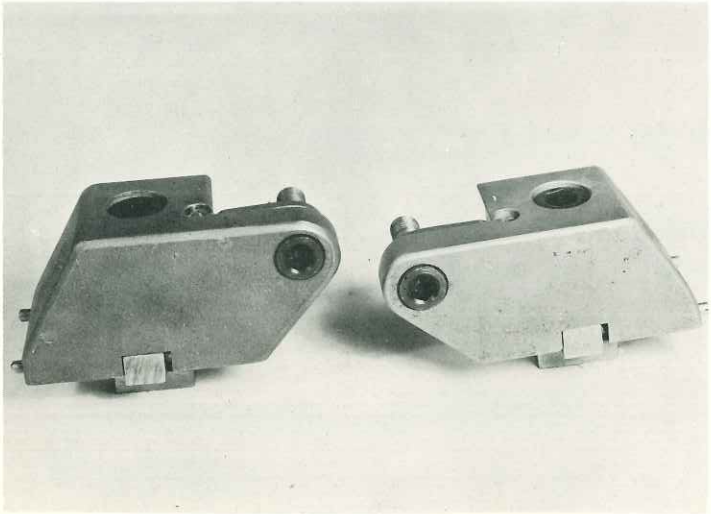


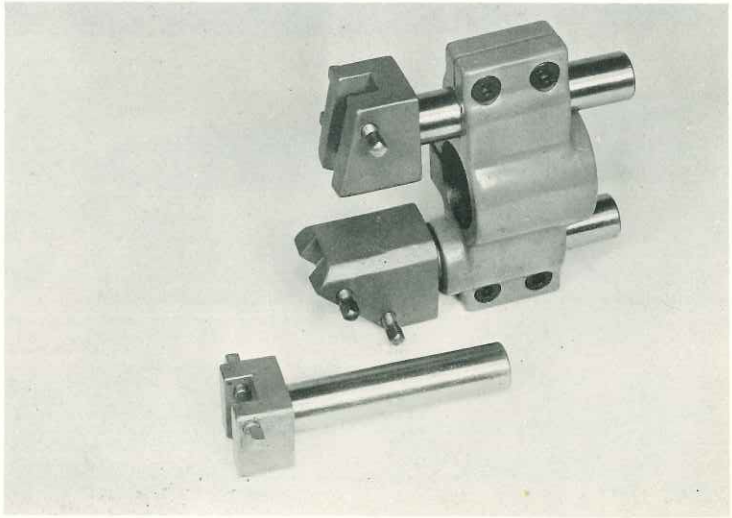


SPECIAL TOOL HOLDERS:
END WORKING TOOLS:

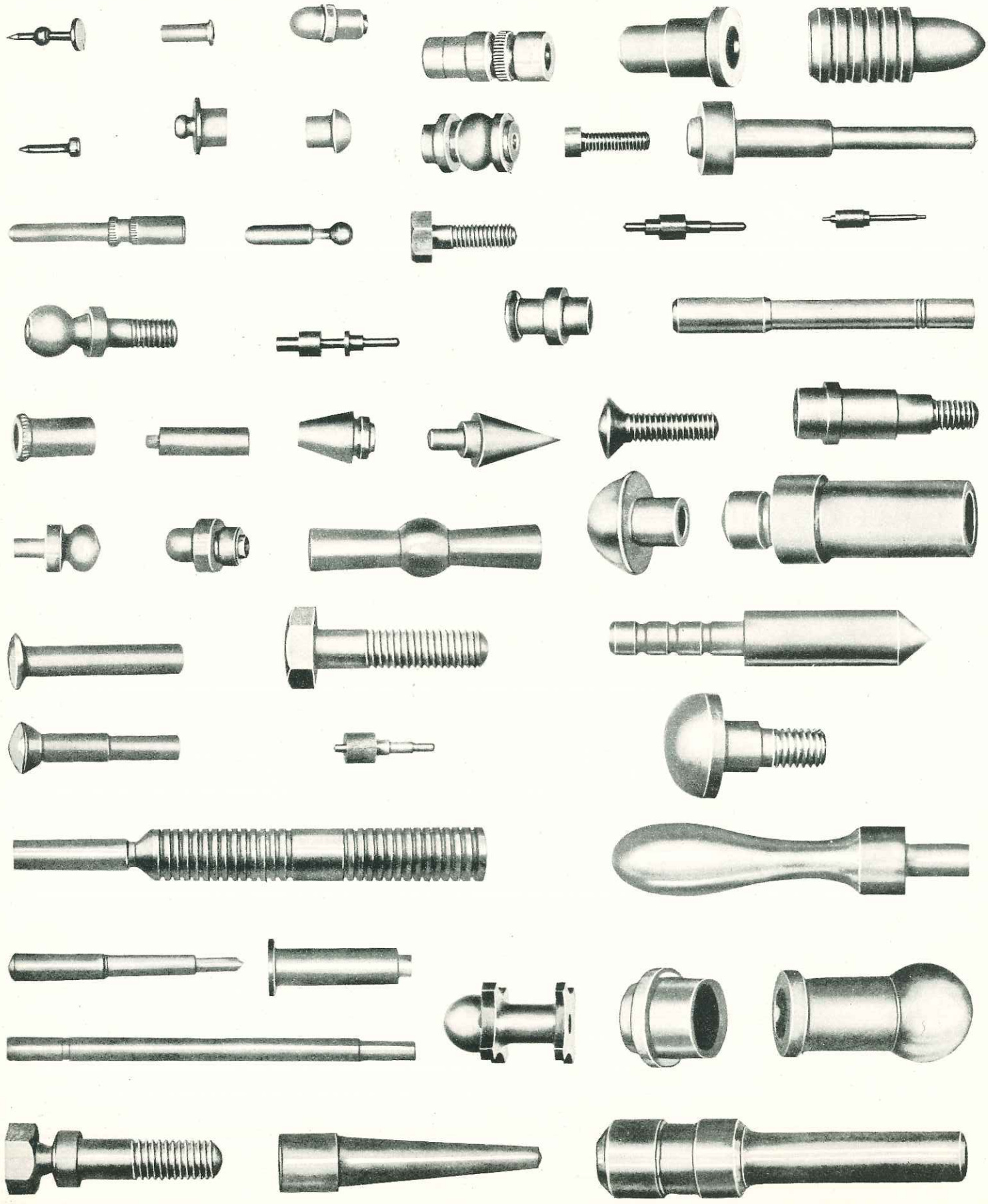
The following Tool Holders are available:

End Working Tools	A15, A20 A25, A15L	A42 A56
Combination Drilling & Turning Tool	Yes	No
Balanced Turning Tool	Yes	Yes
Roller Box Tool	Yes	No
Roller Support	Yes	No
Guide Bushing Box Tool	Yes	No
Guide Bushing Support	Yes	Yes
Drilling & Chamfering Tool	Yes	No
Recessing Tool (Swing-Tool)	Yes	No
Copy Turning Tool	Yes	No
Cross Slide Tools		
Plain Open Tool Holder	Yes	Yes
Double Tool Holder	Yes	Yes
Triple Tool Holder	Yes	Yes
Circular Form Tool Holder	Yes	Yes
Single Knurl Holder	Yes	Yes
Thread Roll Holder	Yes	Yes
Empire Cut-Off Blade Holders	Yes	Yes





Parts Made On Traub Automatics . . . Shown In Full Size



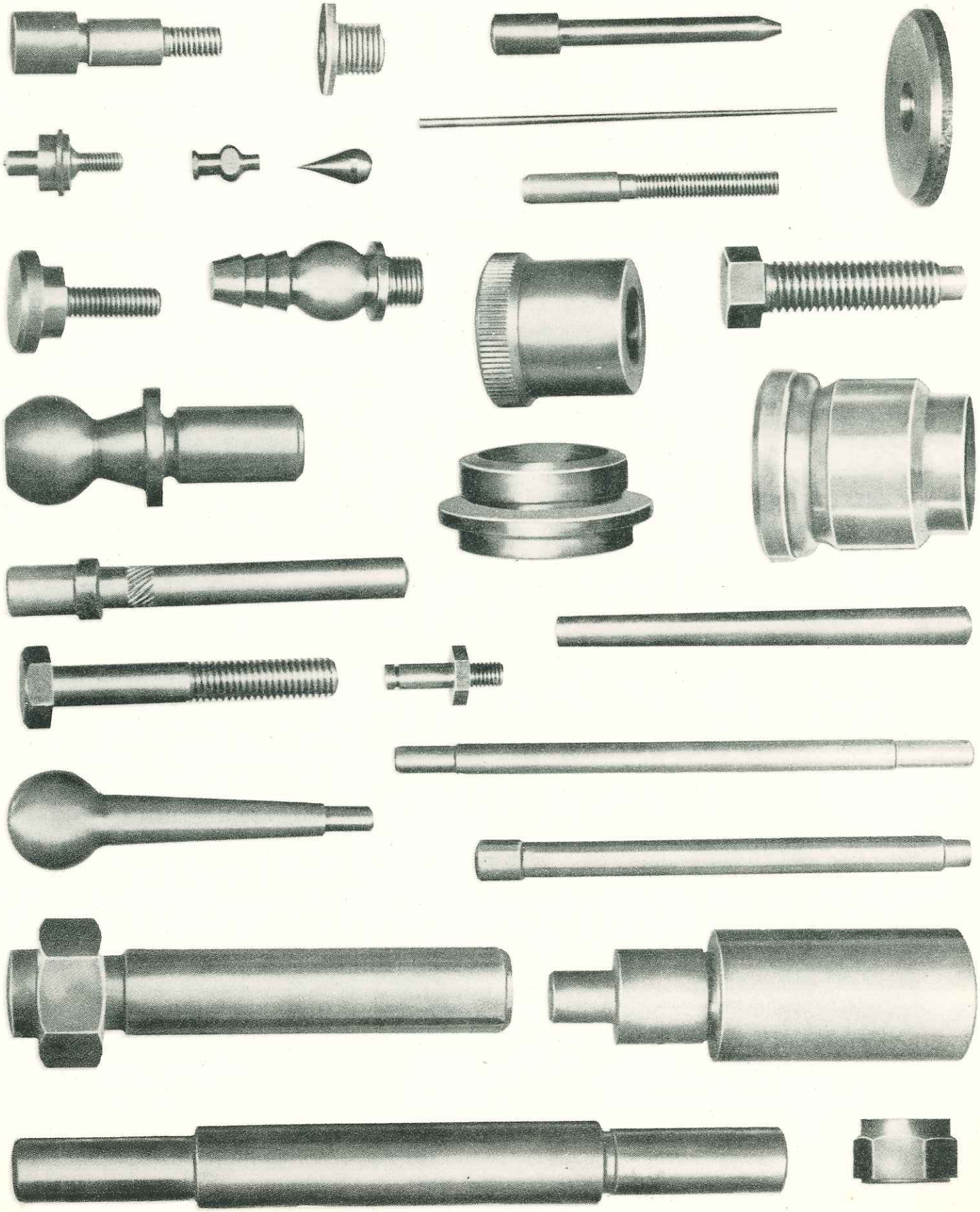


Chart showing which slides and which attachments can and cannot be used in combination with each other.

TRAUB

FIRST in simplicity

	Front Slide	Rear Slide	Single-or-Double Vertical Slides	Tailstock	Longitudinal Turning Attachment	Double Drilling Attachment	Combination Swing-Stop and Centering Attachment (Rear)	Centering Attachment (Front)	Milling Attachment	High-Speed Sensitive Drilling Attachment	Threading Attachment (larger type)	Combination Threading-or-High-Speed Sensitive Drilling Attachment	Screw Slot'g, Back Drilling and Pickup Attachment
Front Slide		Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rear Slide	Yes		Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Single/Double Vertical Slides	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes *
Tailstock	Yes	Yes	Yes		Yes	No	Yes	Yes	Yes	No	No	No	Yes
Longitudinal Turning Att.	No	Yes	Yes	Yes		No	Yes	No	Yes	Yes	Yes	Yes	No
Double Drilling Attachment	Yes	Yes	Yes	No	No		No	No	Yes	No	No	No	Yes
Comb. Swing-Stop and Centering Att. (Rear)	Yes	Yes	Yes	Yes	Yes	No		Yes	Yes	Yes	Yes	Yes	Yes
Centering Att. (Front)	Yes	Yes	Yes	Yes	No	No	Yes		Yes	Yes	Yes	Yes	No
Milling Attachment	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes
High-Speed Drilling Att.	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes		No	No	Yes
Threading Att. (larger type)	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No		No	Yes
Comb. Drilling or Threading Attachment	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	No		Yes
Screw Slotting, Back Drilling and Pickup Attachment	Yes	Yes	Yes *	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

*Single Vertical Slide Only

DISTRIBUTORS:

GUTHERY MACHINE TOOL CORPORATION

38-31 CRESCENT STREET LONG ISLAND CITY 1, N. Y.

Telephone: EXeter 2-4090

SALES . . . SERVICE . . . PARTS

CABLE ADDRESS:
GUTHERINC — NEW YORK

GUTHERY MACHINE TOOL CORPORATION

38-31 CRESCENT STREET • LONG ISLAND CITY 1, N. Y.

telephone: EXeter 2-4090

"TRAUB" SINGLE SPINDLE AUTOMATIC SCREW MACHINES

SPECIFICATIONS:

	"STANDARD TRAUB"					"SWISS TYPE" TRAUB
Model	A-15	A-20	A-25	A-42	A-56*	A-15-L
Brown & Sharpe Collet Number	10	11	21	22-22C-22CT	Special	10
Max. Collet Cap. for bar stock	19/32"	13/16"	1"	1-5/8"	2-3/16"	19/32"
Net Weight, lbs.—appr.	1280	1280	1280	2700	2700	1280
Shipping Weight, lbs.—appr.	1580	1580	1580	3200	3200	1580
Measurements, cu. ft.—appr.	60	60	60	127	127	60
PRICES, F.O.B. *OUR WAREHOUSE,* Long Island City, N. Y.	$2595.–	$2670.–	$2730.–	$4660.–	$4960.–	$3095.–

Machine complete with Standard Equipment listed below.

TRAUB CHUCKER MODEL AF-130
$7,500.00
TRAUB MODEL A26
$3,750.00

STANDARD EQUIPMENT included in Machine Price:

Front and Rear Cross Slides (with limit stops)
Tailstock, with Collet Drawbar
Weight-operated bar feed for 12' Bars
Adjustable Rocker-Arm Bar Stop (Except on A-15-L)
Coolant Pump, Tank, and System,
Main-Drive Motor (220 V., 3-phase, 60 cyc.)
Feed Motor (220 V., 3-phase, 60 cyc.)
Complete Wiring, Controls, Switches,
Rapid Feed Cycle Equipment (Accelerator)
Models A-15-L and A-42 only. Available as
Optional Equipment at Extra Cost on other Models
Set of Change Gears for Feeds,
Adjustable Tool Posts,
Set of Tools & Wrenches.
Cam Setting Dial

ON MODEL A-15-L the following ADDITIONAL STANDARD EQUIPMENT IS INCLUDED IN MACHINE PRICE:

Guide Bushing Support (Adapter $35.00 Extra)
Sliding Carriage
Rapid Feed Cycle Equipment (Accelerator)
Copying Templet Holder

ATTACHMENTS FOR "TRAUB" AUTOMATICS

PARTS and TOOLING for Models A-15, A-20, A-25, A-15-L are interchangeable.

ATTACHMENTS and SPECIAL EQUIPMENT for Models A-15, A-20, A-25, A-15-L:

Vertical Tool Slide, complete	$178.00
Double Vertical Tool Slide, complete	$239.00
Double Drilling Attachment with Rocker Arm, complete	$240.00
Threading Attachment with Motor, complete, 5/16" capacity in steel	$492.00

*For Light Work Only.

Threading Attachment with motor, 5/32" Threading Capacity in steel	$295.00
2-Spindle Drilling and Threading/Tapping Attachment	825.00
Opposed Spindle Attachment	400.00
High Speed Sensitive Drilling Attachment	185.00
Longitudinal Turning Attachment (with fulcrum arm actuated from front or rear camshaft)	179.00
Linkage to operate above from tailstock instead of front camshaft	15.00
Drill holder for longitudinal turning attachment (for combination drilling and/or turning– Including Special Offset Arm for larger cross-travel)	58.00
Centering Attachment (actuated from front camshaft)	90.00
Centering Attachment–Swing Stop Combination (actuated from rear camshaft)	95.00
Overhead Swingstop	56.00
Automatic Electric Shut-Off	31.00
Milling Attachment, with motor, complete	165.00
Parts Deflector	49.50
Work Piece Counter	18.00
Cam Setting Dial	10.00
Individual Machine Light with adjustable arm	18.00
Transparent Splash Guard (clear plastic in sturdy metal frame)	24.00
Sheet Metal Splash Guard	10.00
Rapid Feeding Cycle Equipment with 2-speed Camshaft Motor	186.00
Slotting Attachment (with Pick-up Arm)	380.00
Back-Burring (Drilling) attachment incl. pick-up arm	425.00
Pick-up Attachment	150.00
Permanent-Magnet Pick-up Attachment	105.00
Hand Chucking Attachment	79.50
V-Belt Drive for Clutch (for time cycles of 2 seconds or less)	32.50
Magazine & Hopper Feeds: Prices upon request after receipt of samples and prints	----

TOOL HOLDERS for TAILSTOCK, for all Models:

	A-15, A-20, A-25, A-15-L	A-42
Drill Holder, W11, including either W11/2 or W11/3 Tool Holder	$27.50	—
Turning Tool Holder, W11/2	9.50	—
Chamfering Tool Holder, W11/3	9.50	—
Turning Tool Holder (W35 for A15/25, A15-L, W60 for A-42)	38.00	$57.50
Combination Drilling & Turning Tool Holder with Roller Rest, W27	34.50	—
Turning & Drilling Tool Holder with Roller Rest, W24	32.50	—
Roller Support W20	20.00	—
Roller Support W22	14.00	—
Roller Support W25	30.00	—
Combination Drilling & Turning Tool Holder with Guide Bushing Support, W15	27.50	—
Guide Bushing Support W16 for A15/25, A15-L, W65 for A-42)	17.50	22.00
Combination Drilling & Chamfering Tool Holder, W12	18.00	—
Combination Chamfering & Drilling Tool Holder, W23	15.50	—
Recessing Tool Holder, W18	49.50	—
Copy Turning Tool, W32	58.50	—

TOOL HOLDERS for CROSS SLIDES, for all Models:
Specify Whether for Front Slide or Rear Slide

	A-15, A-20, A-25 A-15-L	A-42
Standard Single Tool Holder	$30.00	$40.00
Plain Open Tool Holder	17.50	27.50
Double Tool Holder	22.50	33.00
Triple Tool Holder	25.50	37.50
Circular Form Tool Holder	30.00	41.00
Single Knurl Holder (Fits all Cross or Vertical Slides)	8.00	12.00

"EMPIRE TOOL CO." TOOL HOLDERS for "LUERS" Cut-Off BLADES, for Models A-15, A-20, A-25, A-15L, A-42:

For Rear Cross Slide	$33.00	$36.50
For Single Vertical Tool Slide	33.00	36.50

COLLETS:

(Note: – Except on Model A-42, Tailstock Collets & Collets for Double Drilling Attachment are the same.)

	A-15, A-20, A-25, A-15-L	A-42
Tailstock, up to max. dia.	½" *	7/8"
Price	$3.00	$5.00
Double Drilling Attachment up to max. dia.	½"	5/8"
Price	3.00	4.50

* 5/8" with Special Quill

FEED FINGER ATTACHMENT and FEED FINGERS:

(Feed fingers not used with standard weight feed)

Models A15, A20, A25 and A15L can be equipped with a positive, cam-operated feeding mechanism in place of the standard weight-operated bar feed. This is of special advantage on small diameter work below 1/8". Prices for this equipment are as follows:

Feed Finger Attachment for Model	A-15, 15-L	A-20	A-25
Price	$165.00	$180.00	$195.00
Feed Fingers, round, max. dia.	.394"	.472"	.709"
Price	2.75	3.30	5.00
Feed Fingers, hex., max. width across flats	.315"	.433"	.630"
Price	4.25	4.75	6.25
Feed Fingers, square, max. width across flats	.276"	.354"	.512"
Price	4.25	4.75	6.25

ACCESSORIES for Model A-42:

Vertical Tool Slide, complete	$268.00
Double Vertical Slide, complete	350.00
Longitudinal Turning Attachment (with fulcrum arm actuated from front or rear camshaft)	356.00
Linkage to operate above from tailstock	20.00
Drill Holder for Longitudinal Turning Attachment	18.00
Centering Attachment (Actuated from front camshaft)	163.00
Centering Attachment – Swing Stop Combination(Actuated from rear camshaft)	189.00
Double Drilling Attachment	440.00
Work Piece Counter	18.00
Automatic Electric Shut-Off	31.00
Machine Light with Adjustable Arm	28.00
Transparent Splash Guard (Clear Plastic in Sturdy Metal Frame)	34.00
Cam Setting Dial	10.00
Threading Attachment – not including Die Head	575.00
Hand Chucking Attachment	95.00

CAM BLANKS:

	A-15, A-20, A-25, A-15-L	A-42
Drum Cams for Tailstock, up to 2" travel ....each	$4.60	—
Drum Cams for Tailstock, 2" to 3½" travel	5.90	7.50
Drum Cams for Tailstock, 4" (to 6½" on A42)	6.50	11.50
Drum Cams for Longitudinal Turning Attachment, if operated from front cam shaft	4.50	5.90
Flat Cross Feed Cams for Front and Rear Slides	2.50	4.40
Flat Cams for the Vertical Slide	3.50	5.50
Drum Cams for Double-Drilling Attachment	6.50	7.75
Indexing Cams for Double-Drilling Attachment	4.50	5.50

TOOLING and SETTING-UP OF MACHINES:

We will set up all models to your blue print, thus the machine will reach you completely tooled-up and can start production immediately upon installation in your plant. The price for this service, depends on the parts involved. OUR OWN FACTORY-TRAINED TECHNICAL PERSONNEL IS ALSO AVAILABLE FOR SET-UP SERVICE IN YOUR PLANT: prices on request. WE WILL ESTIMATE PRODUCTION RATES FROM SAMPLES OR PRINTS SUBMITTED.

OTHER TRAUB PRODUCTS

- CAM MILLERS
- CHIP SEPARATORS
- NUT COUNTERSINKERS
- NUT TAPPERS

GUTHERY STOCKS HARDINGE COLLETS

Style	Fractional Round Hole Sizes	
B & S #10	From 1/16" to 1/2"	AT PREVAILING PRICES
B & S #11	From 1/8" to 3/4"	
B & S #21	From 1/4" to 1"	
B & S #22	From 9/16" to 1-3/16"	
B & S #22	1-1/4" Overcapacity	
B & S #22C	From 1-1/16" to 1-3/8"	
B & S #22C	1-7/16" and 1-1/2" Overcapacity	
B & S #22CT	1-9/16" to 1-5/8"	

GENERAL INFORMATION:

All prices quoted in this price list are net F.O.B. our warehouse, Long Island City, N.Y.
Prices and specifications are subject to change without notice.